

As amended, each of Claims 1 and 29 now further recites that the volume resistivity of the third layer is from 10^{10} to 10^{14} Ohm.cm. Consequently, while the volume resistivity of the third layer is smaller than that of the second layer, it is still relatively large and therefore toner scattering as well as image defects attributable to electric discharge can be prevented.

Each of independent Claims 1 and 29 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Fujiwara, et al. That rejection is respectfully traversed.

Fujiwara, et al. features an intermediate transfer member which comprises at least three layers consisting of a conductive substrate, an intermediate layer and a surface layer 803 and the volume resistivity of the surface layer is said to be lower than the volume resistivity of the intermediate layer. However, Fujiwara, et al. expressly states that the volume resistivity of the surface layer 803 is preferably between 10^2 and 10^5 Ohm.cm (see, column 6, lines 39-41). Thus, Fujiwara, et al. does not disclose each of the recited features of Claims 1 and 29 as now set forth in those claims.

Nor does Fujiwara, et al. suggest the invention as set forth in Claims 1 and 29. As the Examiner will appreciate, Fujiwara, et al. expressly teaches that the surface layer 803 should not exceed 10^5 Ohm.cm because when volume resistivity is greater than 10^5 Ohm.cm load uniformity is reduced, causing image irregularity due to non-uniform resistance of the intermediate layer 802. (See, column 6, lines 45-48)

Applicants have also reviewed the secondary reference to Takekoshi, et al. and respectfully submit that this reference does not disclose the invention nor does it suggest the invention in combination with Fujiwara, et al. For example, and with reference to Figure 1,

Takekoshi, et al. discloses a three layer structure where the middle layer has a volume resistivity of 10^3 to 10^7 Ohm.cm while the outer layers have volume resistivities of 10^7 to 10^{13} Ohm.cm. Thus, the layered structure disclosed in Takekoshi, et al. does not correspond to that of the present invention. More specifically, while in the present invention the middle layer has the highest volume resistivity, Takekoshi, et al. teaches and discloses a layered structure in which the middle layer has the lowest volume resistivity. There is no reasonable way to combine Takekoshi, et al. with Fujiwara, et al. to obtain the invention. Accordingly, Applicants respectfully submit that Claims 1 and 29 are patentable over the art of record whether the art of record is taken individually or in combination.

Independent Claims 46 and 74 are directed to an image forming apparatus with an intermediary transfer member and an intermediary transfer member, respectively. In each case the intermediary transfer member includes a first layer and a second layer for receiving the toner image from the image bearing means, wherein the first layer is integrally coated with the second layer, and wherein the second layer has a buying resistivity smaller than that of the first layer. Each claim now recites that the volume resistivity of the second layer is from 10^{10} to 10^{14} Ohm.cm. Consequently, the volume resistivity of the second layer is smaller than that of the first layer but is still relatively large (i.e., 10^{10} to 10^{14} Ohm.cm), so that toner scattering as well as image defects attributable to electric discharge can be effectively prevented.

Applicants respectfully submit that Fujiwara, et al. fails to disclose or suggest the invention as recited in Claims 46 and 74 essentially for the reasons set forth above with respect to Claims 1 and 29. Nor does the secondary art of record meet the shortcomings of Fujiwara, et al.

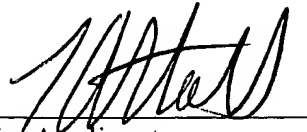
Accordingly, Applicants respectfully submit that independent Claims 46 and 74 are patentable over the applied art of record at least for reasons noted above with respect to Claims 1 and 29.

The remaining claims in the above application are dependent claims which depend either directly or indirectly from one of the above-discussed independent claims and are therefore patentable over the art of record for reasons noted above with respect to the independent claims. In addition, each recite features of the invention still further distinguishing it from the applied art. Favorable and independent consideration thereof is respectfully sought.

Applicants respectfully submit that all outstanding matters in the above application have been addressed and that this application is in condition for allowance. Favorable reconsideration and early passage to issue of the above application are respectfully sought.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

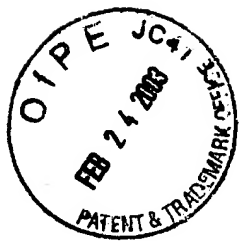
A handwritten signature in black ink, appearing to read 'L. Stahl', written over a horizontal line.

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DC-MAIN 104767 v1



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MARKED-UP VERSION SHOWING CHANGES TO THE CLAIMS

1. (Three Times Amended) An image forming apparatus comprising:
image bearing means for bearing a toner image;
an intermediary transfer member, wherein the toner image is electrostatically transferred from said image bearing means onto said intermediary transfer member, and then transferred from said intermediary transfer member onto a transfer material;
wherein said intermediary transfer member includes a first layer, a second layer on said first layer, and a third layer on said second layer, for receiving the toner image from said image bearing means, and
wherein a volume resistivity of said first layer is smaller than that of said third layer, [and] a volume resistivity of said third layer is smaller than that of said second layer, and
wherein the volume resistivity of said third layer is 10^{10} to 10^{14} Ohm.cm.

Claim 3 and 4 cancelled herein.

5. (Twice Amended) An apparatus according to any one of Claims 1 and 2 [1-4], wherein said third layer has a thickness of 1-5 microns.

29. (Twice Amended) An intermediary transfer member onto which a toner image is electrostatically transferred from image bearing means, wherein the toner image on said intermediary transfer member is transferred onto a transfer material, said intermediary transfer member comprising:

a first layer;

a second layer, provided on said first layer; and

a third layer, provided on said second layer, for receiving the toner image from the image bearing means,

wherein a volume resistivity of said first layer is smaller than that of said third layer, [and] a volume resistivity of said third layer is smaller than that of said second layer, and the volume resistivity of said third layer is 10^{10} to 10^{14} Ohm.cm.

Claims 31 and 32 are cancelled herein.

33. (Twice Amended) An intermediary transfer member according to any one of Claims 29 and 30 [29-32], wherein said third layer has a thickness of 1-5 microns.

46. (Twice Amended) An image forming apparatus comprising:

image bearing means for bearing a toner image;

an intermediary transfer member, wherein the toner image is electrostatically transferred from said image bearing means onto said intermediary transfer member, and then transferred from said intermediary transfer member onto a transfer material,

wherein said intermediary transfer member includes a first layer and a second layer for receiving the toner image from said image bearing means, wherein said first layer is integrally coated with said second layer, [and] wherein said second layer has a volume resistivity smaller than that of said first layer, and the volume resistivity of said second layer is 10^{10} to 10^{14} Ohm.cm.

Claim 48 and 49 are cancelled herein.

50. (Amended) An apparatus according to any one of Claims 46 and 47 [46-49], wherein said second layer has a thickness of 1-5 microns.

74. (Twice Amended) An intermediary transfer member onto which a toner image is electrostatically transferred from image bearing means, wherein the toner image on said intermediary transfer member is transferred onto a transfer material, said intermediary transfer member comprising:

a first layer; and

a second layer for receiving the toner image from said image bearing means, wherein said first layer is integrally coated with said second layer, [and] wherein said second

layer has a volume resistivity smaller than that of said first layer, and the volume resistivity of said second layer is 10^{10} to 10^{14} Ohm.cm.

Claims 76 and 77 are cancelled herein.

78. (Amended) An intermediary transfer member according to any one of Claims 74 and 75 [74-77], wherein said second layer has a thickness of 1-5 microns.